This listing of allowed claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Allowed Claims**

- 1. (currently amended) A method for selecting a clone of an ES cell containing a mutation in a gene that is expressed in a test cell comprising:
  - (a) providing cDNA obtained by reverse transcription of mRNA of the test cell;
  - (b) providing a collection of cultured ES cells organized into individual clones, wherein each clone is of an ES cell having a mutation in an exon in its genome, the mutation being in a different exon in cells of different clones;
  - (c) providing an array of different single stranded polynucleotides, the polynucleotides being fragments of exons containing mutations in (b);
  - (d) exposing the cDNA to the array under conditions permitting hybridization of polynucleotides in the array to nucleic acids;
  - (e) detecting hybridization of cDNA to a polynucleotide on the array; and,
  - (f) selecting a clone in the collection from which a hybridizing polynucleotide detected at (e) (e) is an exon fragment.
  - 2. (allowed) The method of claim 1, wherein the ES cells are murine.
  - 3. (allowed) The method of claim 1, wherein mutations in the ES cells are as a result of introducing an exon trap vector into ES cells.
  - 4. (allowed) The method of claim 1, wherein the array is a nucleic acid microarray.
  - 5. (allowed) The method of claim 4, wherein the microarray comprises at least 500 different polynucleotides on a solid support surface.
  - 6. (allowed) The method of claim 5, wherein the microarray comprises at least about 1,000 different polynucleotides.
  - 7. (allowed) The method of claim 1, wherein the cDNA is labelled to facilitate detection at(e).

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- 8. (allowed) The method of claim 7, wherein the label is fluorescent or radioactive.
- 9. (allowed) The method of claim 1, wherein selecting a clone comprises physically segregating a sample of ES cells from a selected clone.

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